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Nursing Research: Get started!

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Abstract:

The purpose of this article is to guide novice researchers through a process of collaboration using Lancaster's six Cs of collaborative research: contribution, communication, commitment, compatibility, consensus, and credit. Successes of a collaborative research project conducted by nurse academicians and nurse clinicians are highlighted to demonstrate the process.

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Article:

Getting started in nursing research can be an overwhelming task. How do you design a study? Where do you get subjects? How do you analyze data? The good news is that if you have questions like these, you aren't alone. In this era of healthcare reform and evidence-based practice, nursing research is more important than ever to guide practice and improve patient outcomes. There's no better time than the present to begin a research project.

How can you conduct successful research if your institution doesn't have a nurse researcher on staff? The purpose of this article is to guide novice researchers through a process of collaboration using Lancaster's six Cs of collaborative research: contribution, communication, commitment, compatibility, consensus, and credit.[1] Successes of a collaborative research project conducted by nurse academicians and nurse clinicians are highlighted to demonstrate the process.

Collaboration defined

Collaboration can be described as pooling knowledge, talents, resources, and interests. Sharing time-consuming tasks and work intensity creates a quality product and promotes professional development of all parties involved.[2,3] For collaboration to occur between agencies rather than

individuals, the agencies must recognize the necessity of the proposed work, have the ability to undertake agreed-upon actions, and accept responsibility by ensuring the availability of resources.[4–6] Collaborating agencies must identify what they wish to gain from their relationship and what they can contribute. Identifying each agency's self-interest is critical to establish a win-win relationship. When self-interest is openly discussed, trust is established and partners can help meet the needs of one another.[7]

Collaborative research is growing in nursing in part because it brings a greater likelihood of attracting funding; greater access to practice settings, client populations, and resources; and a greater possibility of establishing institutional linkages.[2] In particular, collaboration between clinical agencies and educational institutions in research offers many advantages, including increasing the potential number of research participants, integrating research into the clinical setting, helping researchers improve the quality of their work and making the research findings more relevant to those in the clinical setting by including participants who are likely to be seen as patients in everyday practice.[2, 4–6, 8] Moreover, collaborative research between clinical agencies and educational institutions is critical for sharing knowledge between clinicians and nurse researchers, leading to evidence-based care that results in the best possible patient outcomes.

The six Cs of collaborative research

In an effort to reduce infant mortality, the goal of the collaborative pilot study, Prenatal Care: The Beginning of a Lifetime (PCBL), was to provide a comprehensive, standardized approach to prenatal care in an urban county in North Carolina. Using the Improving Prenatal Care Model of Vermont[9] as an exemplar, the project guided obstetric practices to focus on improving the quality, efficacy, and efficiency of prenatal care services. The pilot was also designed to renew interest in consistent education, risk assessment, and linkages to community resources for patients.

Researchers from the academic side were an experienced, doctorally prepared nursing faculty member from a local university, a doctoral nursing student, and two other nursing students from master's and baccalaureate degree programs. Those involved from the clinical side included the director of nursing from a local hospital, who served as the principal investigator for the pilot; a women's health nurse practitioner, who served as project coordinator; and a multidisciplinary task force, which served as an advisory council. The multidisciplinary task force included nursing personnel from participating obstetric offices, a clinical nurse specialist, perinatal education specialists, a physician who served as medical director, and a social worker. A dietitian, diabetic educator, lactation consultant, and maternal and fetal medicine physician were available for consultation as needed.

Contribution

Contribution refers to the time and effort that members of a collaborative team give to the research.[10] All members of the PCBL team were eager to bring to the table their knowledge and expertise whether in research or clinical practice. There was open dialogue about the contributions each member could make to the study to ensure that tasks were divided according to the skills and abilities of each member. It was agreed that the project coordinator would work to inform administrators and staff from both the hospital and the participating agencies (settings where participant recruitment would take place) about the purpose and goals of the study. In addition, the project coordinator would be the liaison between the hospital staff and the PCBL team. The project coordinator was also responsible for most of the data collection, with assistance from the director of nursing, nursing students, and the clinic administrator.

The director of nursing's major function was to provide guidance and leadership to the team. The nurse manager of one of the prenatal clinics for recruitment and data collection was responsible for ensuring that nursing staff were well informed about the study and their roles and responsibilities in contributing to the success of the project. She was also instrumental during the planning of the research in guiding the team through a participant recruitment and data collection process that didn't disrupt the clinic routine. The nursing professor and the doctoral student assisted the project coordinator with the research project design and participant recruitment and enrollment. Because the doctoral student was well versed in infant safe sleep practices, she agreed to also contribute to the health education component of the project.

With her extensive experience in obtaining approval for studies involving human subjects, the nursing professor took on the task of completing and submitting the Institutional Review Board (IRB) application. This hospital has a Nursing Research Council, which reviews research proposed to be conducted before IRB review, so the proposal was reviewed by this body as well. Data were collected by the project coordinator and the nursing students. The professor and the doctoral student were assigned the task of data entry, analysis, and summary of the pilot project's outcomes.

The roles and responsibilities of each team member were assigned and clearly defined very early in the process. This eliminated any role confusion or power struggles that might have surfaced later. Although the various members were responsible for different aspects of the study, all reviewed and gave feedback on each other's contributions. This fostered the sharing of knowledge and experience among the team so that members learned from one another.

Communication

Effective, open communication between team members is a critical component of research collaboration.*8,10–13* Scheduled meetings and other forms of ongoing communication are important for the team to stay focused on the objectives of the study.*10* During the initial stages of the PCBL project, the team met on a biweekly basis. When the project was well underway, the team continued to meet, although less frequently, for progress updates, to follow up on issues

related to recruitment and data collection, and to evaluate and make revisions to the research plan as necessary.

The project coordinator distributed meeting agendas and other pertinent documents in advance so that team members would have time to prepare and reflect on issues that might be relevant to the upcoming meeting. Additionally, minutes were distributed soon after the meeting for team members' review and for those who were unable to attend the meeting. During the interval between face-to-face meetings, team members communicated via telephone and e-mail. There was also ongoing communication with the project's major stakeholders, including the funding foundation and the recruitment sites. This helped to ensure transparency and promote rigor of the research process.

Commitment

Another key component of collaborative research is the commitment a team makes to the research project. This commitment depends on members' interest in the objectives of the project, which in turn influences their willingness to engage in the collaborative process. According to Lancaster, commitment involves both physical and emotional investment in a project, including time, energy, and resources.[1] This is a crucial point because both nurse academicians and clinicians must struggle to maximize their time and energy in their employing institutions.

Gelling and Chatfield suggested that members of the research team who are pressured or mandated to participate may be less willing to engage or commit.[10] No members of the PCBL team fell into this category. All members willingly agreed to participate because of their vested interest in the project. A clear understanding of their roles and an awareness of the need to invest adequate time and energy into the project enhanced the commitment of the team members. Collaborative projects tend to work best when individuals have the same level of commitment and if all involved give the project the same level of priority. This was clearly the case with the PCBL team.

Compatibility

Compatibility in collaborative research refers to the degree to which team members fit and work together to make an effective whole.[1,10] It's important for team members to respect and understand each other.[14] Lancaster noted that compatibility means finding ways to harmonize different individuals' styles so that participants maintain respect for one another and bring out the best in each other.[1]

To promote compatibility, members of the PCBL team were constantly encouraged to recognize and appreciate the knowledge, talents, and skills that each individual brought to the table. Because the processes of the PCBL team were nonhierarchical in nature, all members had equal opportunities to contribute to project planning and decision making, take the lead when necessary, and take credit for the success of the project. This ensured true collaboration, rather

than collaboration in which some individuals do the bulk of the work but the entire team receives the credit for it.

Although some members of the PCBL team hadn't been acquainted with other members before working together, lack of compatibility didn't become an issue. Frequent meetings assisted team members to become familiar with one another and share information on their background, skills, and motivations for participating in the research project.

Consensus

Consensus, like compatibility, involves a never-ending process of communication, compromise, and negotiation.[1] In a research project of any kind, consensus is particularly important because a change in protocol that may seem minor to a clinician can greatly affect the integrity of the study. For consensus to occur, members need to agree on the research question, research design, methodology, and analysis, and on the contributions each member will make to the project. Consensus is best achieved when members are involved from the beginning in project planning and decision making.[11] Expectations and contributions of each member of the PCBL team were outlined early in the collaborative process. In addition, all members were equally involved in the planning and decision making. Discussions at PCBL team meetings allowed team members to reach consensus about various aspects of the project.

Credit

Credit refers to ownership of the group's efforts and the findings that emerge from the study.[15] This can become a very troublesome issue if not addressed before submitting manuscripts for publication, presenting at conferences, and so forth. Decisions related to ownership should be made when all members of the research team are present.[15] Additionally, decisions about credit should be recorded either in meeting minutes or in a separate written agreement. This ensures that should any disagreements occur, there's written documentation of the terms agreed upon by the team.

The PCBL team wasn't as vigilant about establishing credit agreements ahead of time as Govoni and Pierce recommend. However, the director and the nursing professor had a long-term relationship that undergirded this project and influenced the willingness of all parties to participate, team members' trust, and the integrity of the project. However, this doesn't negate the importance of having clear expectations in writing.

Discussion

Collaborative research between clinicians and academicians promotes stronger science, ensures that the research is relevant to those working in the clinical environment, and bridges the gaps between theory, research, and practice. Historically, in collaborations between academicians and clinicians, the clinicians acted as data collectors for academic researchers who designed, and

often got credit for, the entire project. Academic researchers often struggled to gain entrance into clinical settings, and at times conducted studies that weren't the most important for clinical practice. Clinician and academic researcher roles were separate.[16] The PCBL team didn't follow this traditional model. Roles and responsibilities were assigned to team members according to willingness, knowledge, and expertise. The functions of the team were nonhierarchical, which made it possible to avoid common problems associated with power and politics.

The PCBL project was a success for several reasons. Not only were the purposes of the study achieved, but the members of the research team also learned a great deal from each other and about the collaborative research process itself. Academicians gained access to subjects and insight into relevant clinical practice problems needing investigation. Clinicians obtained assistance with project design, data collection, and management of the research database. Team members contributed equally to the project and committed time, energy, and resources throughout the course of the research. The team understood each other's roles and responsibilities and trusted one another's skills and abilities to carry out the assigned tasks. Without these commitments, the collaborative research process can be derailed by personal agendas, power struggles, and conflicts.

The PCBL team was extremely proud of their accomplishments. They were surprised at how easily they worked together, how enjoyable the process turned out to be, and how naturally their knowledge and skills complemented one another. It's hoped that the six Cs of collaboration can guide others in their collaborative research endeavors. After all, better patient care is the ultimate goal of nursing research. This is the common ground that nurse researchers and practicing nurses surely share and, whatever their interests and priorities, it provides the rationale for closer collaboration.

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